(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 1 September 2005 (01.09.2005)

PCT

(10) International Publication Number WO 2005/080058 A1

(51) International Patent Classification⁷:

B28C 7/12

(21) International Application Number:

PCT/US2005/004405

- **(22) International Filing Date:** 14 February 2005 (14.02.2005)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/544,720

13 February 2004 (13.02.2004) US

- (71) Applicant (for all designated States except US): RS SO-LUTIONS, LLC [US/US]; 4241 Allendorf Drive, Cincinnati, OH 45209 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): COOLEY, Roy [US/US]; 3837 Hopemount Drive, Lexington, KY 40514 (US). COMPTON, John, I. [US/US]; 2104 Hunters Wood Lane, Lexington, KY 40502 (US). TOPPUTO, Michael [US/US]; 6605 San Mateo Drive, West Chester, OH 45069 (US).

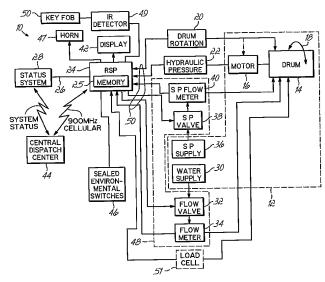
- (74) Agents: HUMPHREY, Thomas, W. et al.; Wood, Herron & Evans, L.L.P., 2700 Carew Tower, Cincinnati, OH 45202
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

[Continued on next page]

(54) Title: METHOD AND SYSTEM FOR CALCULATING AND REPORTING SLUMP IN DELIVERY VEHICLES



(57) Abstract: A system for calculating and reporting slump in a delivery vehicle having a mixing drum (14) and hydraulic drive (16) for rotating the mixing drum, including a rotational sensor (20) configured to sense a rotational speed of the mixing drum, a hydraulic sensor (22) coupled to the hydraulic drive and configured to sense a hydraulic pressure required to turn the mixing drum, and a communications port (26) configured to communicate a slump calculation to a status system (28) commonly used in the concrete industry, wherein the sensing of the rotational speed of the mixing drum is used to qualify a calculation of current slump based on the hydraulic pressure required to turn the mixing drum.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.